BEST AVAILABLE COTY



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent

In re patent application of: FOSTER et al.

Serial No.: 09/679,643

Filed: October 5, 2000

For: S. AUREUS FIBRINOGEN BINDING AND TEIN GENE

Examiner: RECEIVED

Art Unit: 1645 JAN 23 2001

Docket No.: TECH CENTER 1600/2900

P06282US02/BAS

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.98(d)

(For a Continuing Application other than a Rule 53d "Continued Prosecution Application")

Assistant Commissioner for Patents Washington, D.C.

SIR:

Please consider and make of record pursuant to 37 C.F.R. §1.97-1.98 the information previously cited by or submitted to the Office in the prior application(s) relied on for an earlier filing date under 35 U.S.C. §120.

The following listing(s) of such information are attached hereto (check as appropriate):

X Form(s) PTO 892 listing information cited by the Office.

X Form(s) PTO 1449 or FB-A820 listing information cited to the Office.

The prior application(s) is(are) identified in the application papers and in the enclosed listing form(s).

Favorable consideration is respectfully requested.

Respectfully submitted,

Date: 19 January 2001

By: B. Aaron Schulman

Registration No.: 31,877

LARSON & TAYLOR, PLC • 1199 North Fairfax St. • Suite 900 • Alexandria, VA 22314

RECEIVED

		U.S. Decestment of Commerce Attorney Ocket No.: Serial No.:
TO Form 1	449	U.S. Department of Commerce Attorney Docket No.: Serial No.: Patent and Trademark Of ips P-9050-24420 TECH CENTER 1600/2900
	1	NFORMATION DISCLOSURE CITATION Applicant: Timothy James FOSTER et al.
		Sheet 1 of 3 Sheet 1 of 3 Sheet 1 of 3 Group: Not Assigned
xaminer nitials		OTHER DOCUMENTS (Cacluding Author, Jotle, Date, Pertinent Pages, etc.)
Vo		Amann, E. and Brosius, J. (1985). "AREMANDORS' for regulated high level expression of cloned genes in <u>Esherichia coli</u> ." Gene 40, 183-190.
	AB	Baier, R.E. (1977). " The organisation of blood components near interfaces." Ann N.Y. Acad Sci 283:17-36.
	AC	Boden, H.K., and flock, J.I. (1989). "Fibrinogen-binding protein/clumping factor from <u>Staphylococcus aureus</u> . Infect. Immum. 57: 2358-2363.
	AD	Boden, M.K., and flock, J.I. (1992). "Evidence for three different fibrinogen binding proteins with unique properties from <u>Staphylococcus aureus</u> strain Newman." Microbiol. Pathogen., 12(4), 289-298.
· ·	ΑE	Boden, M.K., and flock, J.I. (1994). "Cloning and characterization of a gene for a 19kDa Fibrinogen-binding protein from <u>Staphylococcus aureus</u> ." Molec. Microbiol. 12(4), 599-606.
	AF	Chhatwal, G.S., Albohn, G. and Blobel, H. (1987). "Interaction between fibronectin and purified staphyococcacumping factor." FEMS Microbiol. Lett. 44, 147-151.
		Cheung, A. and Fischetti, V.A. (1990). "Role of surface proteins in staphylococcal adherence to catheters in vitro." J. Infect. Dis. 161, 1177-1186.
	AH	Cheung, A.L. Kirshnan, N., Jaffe, E.A. and Fischetti, V.A. (1991). "Fibrinogen acts as a bridging molecule in the adherence of <u>Staphylococcus aureus</u> to cultured human endothelial cells." J. Clin. Invest. 87, 2236-2245.
		Cheung, A.L., Yeaman, M.R. Sullam,, P.M., Witt, M.D. and Bayer A.S. (1994). "Role of the <u>sar</u> locus of <u>Staphylococcus aureus</u> in induction of endocarditis in rabbits." Infect. Immun. 62, 1719-1725.
	AJ	Cottonaro, C.N. Roohk, H.V., Shimica, G. and Sperling, D.R. (1981). "Quantitation and characterization of competitive protein binding to polymers." Trans Am. Soc. Artif. Inter. Organs 27:391-395.
		Davidson, V.E., and Sandford, B.A. (1982). "Factors influensing adherence of <u>Staphylococcus aureus</u> to Influenza A virus-infected cell cultures." Infect. Immun, 37:946-955.
	AL	Duthie, E.S. (1954). "Evidence of two forms of staphlococcal coagulase." J. Gen. Microbiol. 10:427-436.
		Espersen, F., Clemmensen, I., and Barkholt, V. (1985). "Isolation of <u>Staphylococcus aureus</u> clumping factor." Infect. Immun. 49:700-708.
XAVINER:	Đ٢	nitial if reference considered, whether or not citation is in conformance with MPEP 609. aw line through citation if not in conformance and not considered. actude copy of this form with next communication to Applicant
opies of	ref	erences not provided at the time of this submission.
		11/10/01

Ι.



JAN 23 7001

PTO Form 14	.49	U.S. Department of Commence Attorney Docket No.: Patent and Trademark Office P-9050-24420 Fig.: Not Yet Assigned
	1	INFORMATION DISCLOSURE CITATION CAPPLICANT: Timothy James FOSTER et al.
		Sheet 2 of 3 Sheet
Examiner Initials		OTHER DOCUMENTS (Luding Author) Title, Date, Pertinent Pages, etc.)
	AN	Garrison, P.K. and Freedman, L.R. (1970). "Experimental endocarditis. 1. Staphylococcal endocarditis in rabbits resulting from placement of a polyethylene catheter in the right side of the heart." Yale J. Biol. Med. 42, 394-410.
1	ΑO	Guan, K. and J.E. Dixon. (1991). "Eukaryotic proteins expressed in <u>Escherichia coti</u> : An improved thrombin cleavage and purification procedure of fusion proteins with glutathione \$-transverse." Anal. Biochem. 192, 262-267.
	AP	Hawiger, J.S., Hammond, D.K., Timmons, S. and Budzynski, A.Z. (1978). "Interaction of human fibrinogen with staphylococci: presence of a binding region on a normal and abnormal fibrinogen variants and fibrinogen Blood 51:799-812.
	ΑQ	Hawiger, J.S., Timmons, S., Strong, D.D. Cottrell, B.A., Riley, H., and Doolittle, R.F. (1982). "Identification of a region of human fibrinogen interacting with staphylococcal clumping factor." Biochemistry 21:1407-1413.
	AR	Herrmann, M., Lai, Q.J., Albrecht, R.M., Mosher, D.F. and Proctor, R.A. (1993). "Adhesion of a <u>Staphylococcus</u> <u>aureus</u> to surface-bound platelets: role of fibrinigen/fibrin and platelet integrins." J. Infect. Dis. 167, 312-322.
	AS	Homonylo McGavin, M., Krajewska-Pietrasik, D., Ryden, C. and Hook, M. (1993). "Identification of a Staphylococcus aureus extracellular matrix-binding protein with broad specificity." Infect. Immun. 61, 2479-2485.
	ΑT	Kochwa, S., Litwak, R.S. Rosenfield, R.E. and Leonard, E.F. (1977). "Blood elements at foreign surfaces: a biochemical approach to study the absorption of plasma proteins." Ann. NY Acad Sci 238, 27-49.
		Kristinsson, K.G. (1989). "Adherence of staphylococci to intravascular catheters." J. Med. Microbiol. 28:249-257.
	ΑV	Lantz, M.S., Allen, R.D., Bounelis, P., Switzalski, L.M. and Hook, M. (1990). " <u>Bacteriodes gingivatis</u> and <u>Bacteriodes intermedius</u> recognize different sites on human fibrinogen." J. Bacteriol. 172, 716-726.
	AU	Lee, C.Y., Buranem, S.L. and Ye, Z-H. (1991). "Construction of single copy integration vectors for Staphylococcus aureus. Gene 103:101-105.
		McDevitt, D., Vaudaux P. and Foster, T.J. (1992). "Genetic evidence that bound coagulase of Staphylococcus aureus is not clumping factor." Infect. Immun. 60:1514-1523.
	AY	McDevitt, D., Francois, P., Vaudaux, P. and Foster T.J. (1994). "Molecular characterization of the fibrinogen recepter (clumping factor) of <u>Staphylococcus aureus</u> . Molec, Microbiol. 11, 237-248.
	μz	Maki, D.G. (1992). "Infections associated with intravascular lines." In <u>Current topics in infectious diseases</u> , Vol. 3 Remington J.S., and Swartz, M.N. (eds.). McGraw Hill, New York, pp. 309-363.
*EXAMINER:	Dr	nitial if reference considered, whether or not citation is in conformance with MPEP 609. The considered is a conformance and not considered. The copy of this form with next communication to Applicant.
*Copies of	ref	ferences not provided at the time of this submission.

Mullolon

RECEIVED

JAN 23 2001

PTO Form 14	49	U.S. Department of Commerce Attorney Docket No.: IECH CENTER 1600/2500 Patent and Trademark Office P-9050-24420 Not Yet Assigned
	1	NFORMATION DISCLOSURE CITATIONIAN 1 9 2001 W Applicant: Timothy James FOSTER et al.
	-	Sheet 3 of 3 Filing Date: Concurrently Herewith Group: Not Assigned
Examiner Initials		OTHER DOCUMENTS Concluding anthor, Title, Date, Pertinent Pages, etc.)
	BA	Nowicki, B., Rhen, M., Vaisanen-Rhen, V., Pere, A. and Korhonen, T.K. (1984). "Immunofluorescence study of fimbrial phase variation in <u>Escherichia coli</u> KS71." J. Bacteroil. 160, 691-695.
	88	Patel, A.H., Nowlan, P. Weavers, E.D. and Foster, T.J. (1987). "Virulence of protein A-deficient and alpha toxin-deficient mutants of <u>Staphylococcus aureus</u> isolated by allelic-replacement." Infect. Immun. 55,3103-3110.
	вс	Patti, J.M., Jonsson, H., Guss, B., Switalski, L.M., Wiberg, K., Lindberg, H. and Hook H. (1992). "Molecular Characterization and expression of a gene encoding a <u>Staphylococcus aureus</u> collagen adhesin." J. Biol. Chem. 267, 4766-772.
	BD	Schneewind, O., Mihaylova, D. and Model, P. (1993). "Cell wall sorting signals in surface proteins of Gram-positve bacteria." EMBO J.12, 4803-4811.
	BE	Signas, C., Raucci, G., Jonsson, K., Lindgren, P.E., Anantharamaiah, G.M., Hook, M. and Lindberg, M. (1989). "Nucleotide sequence of the gene for a fibronectin-binding protein from <u>Staphylococcus aureus</u> : use of this peptide sequence in the synthesis of biologically active peptides." Proc. Natl. Acad. Sci. USA 86:699-703.
	BF	Switalski, L.M. (1976). "Isolation and purification of staphylococcal clumping factor." In <u>Staphylococci and staphylococcal diseases</u> ." Jeljaszewicz, J. (ed.) Gustav Fischer Verlag, Stuttgart, pp. 413-425.
	8G	Tomich, P.K., An, F.Y, and Clewell, D.B. (1980). Properties of erythromycin inducible transposon In <u>917</u> in <u>Streptococcus faecalis</u> . J.Bacteroil. 141, 1366-1374.
		Usui, Y. (1986). "Biochemical properties of fibrinogen binding protein (clumping factor) of the staphylococcal cell surface." Z6L Bakt. Hyg. A262, 287-297.
	BI	Vaudaux, P. Pittet, D. Haeberli, A., Huggler, E., Nydegger, U.E., Lew, D.P. and Waldvogel, F.A. (1989). "Host factors selectively increase staphylococcal adherence on inserted catheters. A role for fibronectin and fibrinogen or fibrin." J. Infect. Dis. 160, 865-875.
	BJ	Vaudaux, P., Proctor, R.A., McDevitt, D., Foster, T.J., Lew, D.P., Wabers, H. and S. Cooper. (1991). "Use of adherence defective mutants of <u>Staphylococcus aureus</u> (SA) to identify adherence promoting proteins deposited from profusing blood" Program Abstr. 31st Intersci. Conf. Antimicrobiol. Agents Chemother., abst 1068.
		Vaudaux, P., Pittet, D., Haeberli, H. Lerch, P.G., Morgenthaler, J.J., Proctor, R.A., Waldvogel, F.A. and Lew, D.P. (1993). "Fibronectin is more active than fibrin or fibrinogen in promoting <u>Staphylococcus aureus</u> adherence to inserted intravascular devices." J. Infect, Dis. 167, 633-641.
		Yanisch-Perron, C., Veira, J.C. and Messing, J. (1985). "Improved M13 phage cloning vectors and host strains:" nucleotide sequences of the M13mp18 and pUC19 vectors." Gene 33:103-119.
		Yougman, P. (1985). "Plasmid vectors for recovering and exploiting Tn <u>917</u> transpositions in Bacillus and Other Gram-positives." In Plasmids: a Practical approach. Hardy, K. (ed.), IRL Press, Oxford, pp. 79-103.
*EXAMINER:	Dr	itial if reference considered, whether or not citation is in conformance with MPEP 609. aw line through citation if not in conformance and not considered. clude copy of this form with next communication to Applicant.
*Copies of	ref	erences not provided at the time of this submission.

Jenes (1/10/an